

Appl. No. 09/917,505
Atty. Docket No. CM2016MC
Amdt. Dated September 2, 2004
Reply to Office Action June 28, 2004
Customer No. 27752

CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) An adhesive for a disposable human waste management device:
said disposable human waste management device comprising a bag;
said bag comprising an aperture and a flange surrounding said aperture;
said flange comprising a wearer facing surface and a garment facing surface;
said wearer facing surface comprising an adhesive;
said adhesive having an initial peel strength (P_i) and a final peel strength (P_f) after exposure to water;
wherein said adhesive is formed from a polymer, said polymer being at least partially cross-linked during polymerization by low energy radiation;
wherein the ratio of P_i to P_f is from 2:1 to 1:4; and,
wherein said adhesive has a water absorption capacity of at least 3% by weight.
2. (Previously Presented) The adhesive of Claim 1, wherein said ratio of P_i to P_f is from 2:1.25 to 1:2.
3. (Original) The adhesive of Claim 1, wherein said initial peel strength (P_i) of said adhesive ranges from 0.1N/cm to 5.0N/cm.
4. (Original) The adhesive of Claim 3, wherein said initial peel strength (P_i) of said adhesive ranges from 0.5N/cm to 3.0N/cm.
5. (Previously Presented) The adhesive of Claim 1, wherein said adhesive is a layer having a thickness C in mm;
wherein said adhesive has a viscous modulus at a temperature of 25°C ($G''_{25}(100 \text{ rad/sec})$);
and,
wherein said viscous modulus ($G''_{25}(100 \text{ rad/sec})$) is defined by the equation:

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$$G''_{25} \leq [(7.00 + C) \times 3000] \text{ Pa.}$$

6. (Original) The adhesive of Claim 5, wherein said viscous modulus ($G''_{25}(100 \text{ rad/sec})$) is defined by the equation:

$$G''_{25} \leq [(5.50 + C) \times 1700] \text{ Pa.}$$

7. (Original) The adhesive of Claim 1, wherein:
said adhesive has an elastic modulus at a temperature of 37°C ($G'_{37}(1 \text{ rad/sec})$), and a viscous modulus at a temperature of 37°C ($G''_{37}(1 \text{ rad/sec})$);
wherein $G'_{37}(1 \text{ rad/sec})$ ranges from 500 Pa to 20000 Pa;
wherein $G''_{37}(1 \text{ rad/sec})$ ranges from 100 Pa to 15000 Pa; and,
wherein the ratio $G'_{37}(1 \text{ rad/sec}) / G''_{37}(1 \text{ rad/sec})$ ranges from 1 to 30.
8. (Original) The adhesive of Claim 7, wherein:
said elastic modulus ($G'_{37}(1 \text{ rad/sec})$) ranges from 700 Pa to 15000 Pa; and,
wherein said viscous modulus ($G''_{37}(1 \text{ rad/sec})$) ranges from 100 Pa to 10000 Pa.
9. (Original) The adhesive of Claim 8, wherein:
said elastic modulus $G'_{37}(1 \text{ rad/sec})$ ranges from 1000 Pa to 10000 Pa; and,
wherein said viscous modulus $G''_{37}(1 \text{ rad/sec})$ ranges from 300 Pa to 5000 Pa.
10. (Previously Presented) The adhesive of Claim 1, wherein said adhesive comprises:
a polymer selected from the group consisting of polyacrylics, sulphonated polymers, polyvinyl alcohols, polyvinyl pyrrolidone, polyethylene oxide, and mixtures thereof; and,
a plasticizer selected from the group consisting of polyhydric alcohols, polyethylene glycols, glycerols, sorbitols, water, and combinations thereof.
11. (Original) The adhesive of Claim 10, wherein said adhesive is a hydrophilic-hydrophobic mixed phase adhesive.
12. (Original) The adhesive of Claim 11, wherein the ratio of said hydrophilic components to said hydrophobic components ranges from 5:1 to 1:5.

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13. (Original) The adhesive of Claim 10, wherein the ratio of said polymer to said plasticizer ranges between 1:100 and 100:1.

14. (Original) The adhesive of Claim 13, wherein the ratio of said polymer to said plasticizer ranges between 50:1 and 1:50.

15-18. (Cancelled)

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~~19.~~ (Original) The adhesive of Claim 1 wherein said adhesive is applied to said wearer facing surface at a basis weight from 20 g/m² to 2500 g/m².